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10/781,108	02/18/2004	Andrew Brown	200304416-2	1958

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EXAMINER

BRUCKART, BENJAMIN R

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,108

Applicant(s)

BROWN ET AL.

Examiner

Benjamin R. Bruckart

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5 and 7-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claims 1-5, 7-22 are pending in this Office Action.

Claim 6 is cancelled.

Claims 1, 11, 16, 17 are amended.

The objection to the specification is withdrawn in light of applicant's amendment.

The double patenting rejection is withdrawn in light of applicant's terminal disclaimer.

Terminal Disclaimer

The terminal disclaimer filed 10/21/05 has been accepted.

Specification

The changes to the specification filed 10/21/05 have been accepted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 16-18, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,887,164 by Gupta in view of U.S. Patent No. 5,790,850 by Natu.

The Gupta reference teaches:

Regarding claim 1, a system comprising:

a processor (Gupta: col. 2, lines 57);
a memory coupled to the processor (Gupta: col. 2, 57); and
a bridge device coupling a system bus to the processor (Gupta: Figure 1), the system bus configured to couple to an expansion bus of a managed computer system (Gupta: col. 2, lines 57-60);

wherein the memory is configured to hold a bootable image for the managed computer system (Gupta: col. 5, lines 5-19), and wherein the processor is configured to emulate a disk drive device storing the bootable image (Gupta: col. 5, lines 5-19), and to boot the managed computer system from the bootable image stored in the memory (Gupta: col. 5, lines 5-19);

Gupta doesn't explicitly say rebooting the managed computer with accessing a host processor.

The Natu reference teaches:

wherein the processor is configured to reboot the managed computer system without accessing a host processor of the managed computer system (Natu: col. 1, lines 5-13; col. 2, lines 12-15, 57-63).

The Natu reference further teaches the invention provides redundancy in case one CPU fails (Natu: col. 1, lines 5-13).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta while employing the processor to reboot the managed computer system as taught by Natu in order to provide redundancy in case one CPU fails (col. 1, lines 5-13).

Claim 7 is rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta and Natu.

Regarding claim 7, the system as defined in claim 1 further comprising: a network interface coupled to the memory by the system bus (Gupta: col. 5, lines 20-26; col. 6, lines 11-23); wherein the bootable image is transferable to the memory through the network interface (Gupta: col. 7, lines 20-39).

Regarding claim 11, a method comprising:

transferring a bootable image for a managed computer system to a memory within a management sub-system coupled to the managed computer system (Gupta: col. 7, lines 20-39);
and

emulating a floppy drive by the management sub-system to boot the managed computer system from the bootable image in the memory of the management sub-system (Gupta: col. 5, lines 5-19).

Gupta doesn't explicitly say rebooting the managed computer with accessing a host processor.

The Natu reference teaches:

configuring a processor of the management sub-system to reboot the managed computer system without accessing a host processor of the managed computer system (Natu: col. 1, lines 5-13; col. 2, lines 12-15, 57-63).

The Natu reference further teaches the invention provides redundancy in case one CPU fails (Natu: col. 1, lines 5-13).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta while employing the processor to reboot the managed computer system as taught by Natu in order to provide redundancy in case one CPU fails (col. 1, lines 5-13).

Claim 16 is rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta and Natu.

Regarding claim 16, the method as defined in claim 11 further comprising rebooting the managed computer system, by a processor of the management sub-system, prior to emulating (Gupta: col. 7, lines 46-55; Figure 2; tag 100).

Regarding claim 17, a management sub-system comprising:

- a processor (Gupta: col. 2, lines 57);
 - a memory coupled to the processor (Gupta: col. 2, lines 57), the memory storing a bootable image for a managed computer system (Gupta: col. 5, lines 5-19); and
 - a bridge device coupling a system bus to the processor (Gupta: Figure 1), and wherein the system bus is configured to couple to an expansion bus of the managed computer system (Gupta: col. 5, lines 36-57);
- wherein the processor is configured to emulate a disk drive device storing the bootable image (Gupta: col. 4, lines 5-19), and the processor is further configured to boot the managed computer system from the bootable image stored in the memory (Gupta: col. 5, lines 5-19);
- Gupta doesn't explicitly say rebooting the managed computer with accessing a host processor.

The Natu reference teaches:

wherein the processor is configured to reboot the managed computer system without accessing a host processor of the managed computer system (Natu: col. 1, lines 5-13; col. 2, lines 12-15, 57-63).

The Natu reference further teaches the invention provides redundancy in case one CPU fails (Natu: col. 1, lines 5-13).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta while employing the processor to reboot the managed computer system as taught by Natu in order to provide redundancy in case one CPU fails (col. 1, lines 5-13).

Claims 18, 21-22 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta and Natu.

Regarding claim 18, the management sub-system as defined in claim 17 further comprising: a network interface coupled to the memory by the system bus (Gupta: col. 5, lines 20-26; col. 6, lines 11-23); wherein the bootable image is transferable to the memory through the network interface (Gupta: col. 7, lines 20-39).

Regarding claim 21, the management sub-system as defined in claim 17 wherein the processor, memory and network interface are mounted on an add-in card configured to be substantially within the chassis of the managed computer system (Gupta: col. 5, lines 42-62).

Regarding claim 22, the management sub-system as defined in claim 17 wherein the system bus is a Peripheral Components Interconnect (PCI) bus (Gupta: col. 5, lines 42-58).

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,887,164 by Gupta in view of U.S. Patent No. 5,790,850 by Natu in further view of U.S. Patent No. 6,205,547 by Davis.

Regarding claim 2,

The Gupta and Natu references teach the system as defined in claim 1 and the processor determines an error occurred and whether or not to take over (Natu: col. 3, lines 1-14).

The Gupta and Natu references do not explicitly state determining a source of errors.

The Davis reference teaches a processor is configured to determine a source of an error in the managed computer system by accessing components of the managed computer system over the system bus (Davis: col. 4, lines 16-27; col. 3, lines 56-59).

The Davis reference further teaches the management controller regulates behavior of the computer system by determining and modify the state of the components (Davis: col. 4, lines 63-65).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta and Natu while employing a system management controller as taught by Davis in order to regulate the behavior of the managed computer system by monitoring, controlling, and reporting state information (Davis: col. 4, lines 63-65).

Claims 3-5 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta, Natu and Davis.

Regarding claim 3, the system as defined in claim 1 wherein the processor is configured to store information related to a state of the managed computer system in the memory (Davis: col. 4, lines 21; log file; col. 5, lines 20-35).

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Regarding claim 4, the system as defined in claim 3 wherein the processor is configured to store diagnostic information about the managed computer system in the memory (Davis: col. 4, lines 21; log file; col. 5, lines 20-35).

Regarding claim 5, the system as defined in claim 3 wherein the processor is configured to store event log information about the managed computer system in the memory (Davis: col. 4, lines 21; log file; col. 5, lines 20-35).

Claims 8-10, 12-15, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,887,164 by Gupta in view of U.S. Patent No. 5,790,850 by Natu in further view of U.S. Patent No. 5,974,547 by Klimenko.

Regarding claim 8,

The Gupta and Natu references teach the system as defined in claims 7.

The Gupta and Natio references do not explicitly state a remote management console.

The Klimenko reference teaches bootable image is transferable to the memory through the network interface from a remote management console (Klimenko: col. 8, lines 13-32).

The Klimenko reference further teaches the central administration of boot images can reduce complexity of cost for reliable emulation of booting from servers (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta and Natu while employing a remote management console as taught by Klimenko in order to reduce the cost of administration (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Claims 9-10 are rejected under the same rationale given above. In the rejections set forth, the examiner will address the additional limitations and point to the relevant teachings of Gupta, Natu and Klimenko.

Regarding claim 9, the system as defined in claim 7 wherein the bootable image is transferable to the memory through the network interface using file transfer protocol (FTP) software (Klimenko: col. 7, lines 35, 36).

Regarding claim 10, the system as defined in claim 7 wherein the bootable image is transferable to the memory through the network interface using TFTP software (Klimenko: col. 7, lines 35, 36).

Regarding claim 12,

The Gupta and Natu references teach the method as defined in claim 11.

The Gupta and Natu references do not explicitly state a remote management console.

The Klimenko reference teaches transferring a bootable image to the memory at the behest of a remote management console (Klimenko: col. 8, lines 13-32; col. 12, lines 13-21).

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The Klimenko reference further teaches the central administration of boot images can reduce complexity of cost for reliable emulation of booting from servers (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta and Natu while employing a remote management console as taught by Klimenko in order to reduce the cost of administration (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Claims 13-15 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta, Natu and Klimenko.

Regarding claim 13, the method as defined in claim 12 further comprising transferring the bootable image to the memory from the remote management console (Klimenko: col. 8, lines 13-32; col. 12, lines 13-21).

Regarding claim 14, the method as defined in claim 12 further comprising transferring the bootable image through a network interface coupled to the management sub-system using a File Transfer Protocol (FTP) software (Klimenko: col. 7, lines 35, 36).

Regarding claim 15, the method as defined in claim 12 further comprising transferring the bootable image through a network interface coupled to the management sub-system using TFTP software (Klimenko: col. 7, lines 35, 36).

Regarding claim 19,

The Gupta and Natu references teach the management sub-system as defined in claim 18.

The Gupta and Natu references do not explicitly state a remote management console.

The Klimenko reference teaches transferring a bootable image to the memory at the behest of a remote management console (Klimenko: col. 8, lines 13-32; col. 12, lines 13-21).

The Klimenko reference further teaches the central administration of boot images can reduce complexity of cost for reliable emulation of booting from servers (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the system of a processor with memory coupled to a managed computer system as taught by Gupta and Natu while employing a remote management console as taught by Klimenko in order to reduce the cost of administration (Klimenko: col. 1, lines 41-67; col. 3, lines 31-55).

Claim 20 is rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Gupta, Natu and Klimenko.

Regarding claim 20, the management sub-system as defined in claim 18 wherein the bootable image is transferred to the memory through the network interface using TFTP software (Klimenko: col. 7, lines 35, 36).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 8:00-5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart
Examiner
Art Unit 2155

brb



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER.